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Mobile Broadband Usage in Michigan



December 2012

Mobile broadband gives users the freedom to access the web while not being tethered to a desk. This ability to access music, news, and social networking tools is attracting many new converts, as a growing number of Americans go online with their smartphones.

According to the Pew Internet and the American Life Project, more than one-half of cell phone owners say they use their phones to go online.¹ In 2011, smartphone sales outpaced personal computer sales for the first time, and this upward trend is expected to continue as the technology becomes more affordable and mobile applications grow in importance for an increasing number of Americans.² One indication of mobile broadband's growing influence is that the National Broadband Plan stated that one key goal is for America to be "a leader in mobile innovation, with the fastest and most extensive wireless networks of any nation."³ This booming demand for mobile technology is also helping stimulate new economic development in Michigan, as a recent study by the Mobile Technology Association of Michigan (MTAM) and the Michigan Economic Development Corporation (MEDC) indicates "every mobile-related job that is created in Michigan creates 3.9 additional non-mobile-related positions in the state."⁴

As part of its 2011 Residential Technology Assessment, Connect Michigan surveyed 1,200 Michigan adults to examine how they are using mobile broadband and how it is affecting the way they live, work, and play. Connect Michigan research shows that a growing number of Michiganders are relying on their mobile devices to connect to the Internet for a variety of uses.

Mobile Broadband Adoption in Michigan

Across the state of Michigan, 36% of residents age 18 or older access mobile broadband. This represents approximately 2.7 million Michigan adults who go online via their cell phones, on a laptop or tablet computer through a cellular network. This is lower than the average of 42% among all states surveyed by Connected Nation.⁵

Among these mobile users, 76% (representing approximately 2 million Michigan adults) only use the Internet via their cell phones, while 8% (approximately 219,000 Michiganders) access mobile wireless service on their laptops or tablet computers, and 16% (approximately 437,000 Michigan adults) are connected via both their cell phones and their tablets or laptops (Figure 1).

1 PEW Internet and American Life Project, <http://pewinternet.org/Reports/2012/Cell-Internet-Use-2012/Key-Findings.aspx>

2 Canalys, <http://www.canalys.com/newsroom/smart-phones-overtake-client-pcs-2011>

3 National Broadband Plan, <http://www.broadband.gov/plan/goals-action-items.html>

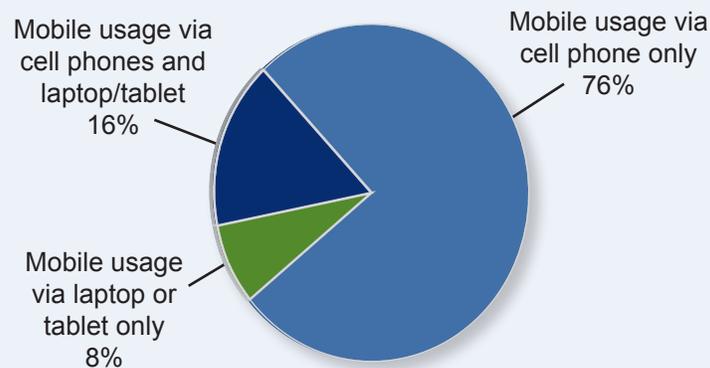
4 <http://michiganmobileusings.com/tag/mobile-technology/>

5 Other states include Alaska, Florida, Iowa, Minnesota, Nevada, Ohio, South Carolina, Tennessee, and Texas.

Among the findings from this survey:

- Across the state of Michigan, **36%** of residents age 18 or older access mobile broadband. This represents approximately **2.7 million Michigan adults** who go online via their cell phones, on a laptop or tablet computer through a cellular network.
- More than **four out of five** mobile broadband users in Michigan (81%) subscribe to home broadband service, meaning that approximately 525,000 Michigan adults rely on their cell phones or mobile devices for Internet service, rather than subscribing to home broadband service.
- More than **one-half** of Michigan adults age 34 or younger say they access broadband via mobile services. This is nearly **four times greater** than the share of adults age 55 or older who access mobile broadband.
- Over **one-half** of African American and Hispanic adults in Michigan say they stay connected to the Internet using mobile broadband services, suggesting that mobile broadband may present an affordable alternative to fixed broadband service among these populations.
- Older Michiganders, rural residents, households without children, and adults who are not employed are **more likely** to say they never use their cell phones to access the Internet, even though they subscribe to a service that allows them to do so.

Figure 1.
Mobile Usage by Device



In addition, more than four out of five mobile broadband users in Michigan (81%) also subscribe to home broadband service, meaning that approximately 525,000 Michigan adults only access the Internet on their cell phones or mobile devices instead of subscribing to home broadband service.

Mobile broadband usage varies across different socioeconomic groups. Individuals who have traditionally been more likely to subscribe to home broadband service are often more likely to use mobile broadband service (Table 1).

Michigan adults who are employed are much more likely to say they use mobile broadband services. Over one-half of Michigan adults who are employed full-time or part-time (51%) access broadband on a cell phone or mobile device, compared to only 19% of those who are not employed.

College-educated Michigan adults are more likely to use mobile broadband service than those who do not have a college education. Similarly, Michiganders with higher annual household incomes are more likely to access mobile broadband than those with lower annual household incomes.

Younger Michigan adults are more likely to adopt mobile broadband services. In fact, more than one-half of Michigan adults age 34 or younger say they access broadband via mobile services. This is nearly four times greater than the share of adults age 55 or older who access mobile broadband.

Rural Michigan adults, some of whom have limited access to mobile phone service, are significantly less likely than urban and suburban residents to access mobile broadband service.

Table 1.
Mobile Broadband Usage
by Demographic

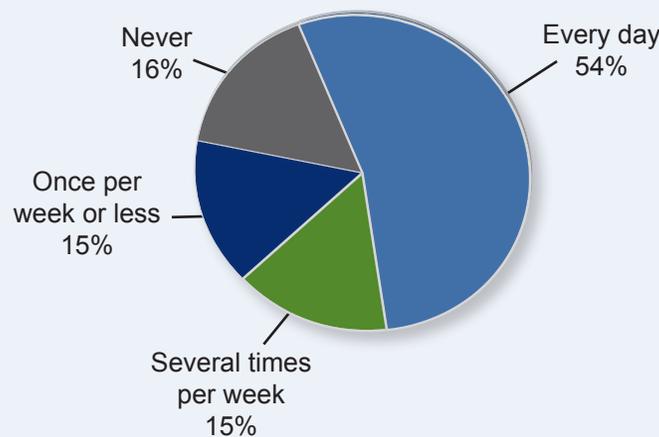
Percent Who Use Mobile Broadband Service	
Statewide	36%
Employment	
Employed	51%
Not employed	19%
Educational Attainment	
No college education	23%
College education	44%
Presence of Children	
Households with children at home	52%
Households do not have children	28%
Annual Household Income	
Less than \$25,000	20%
\$25,000 to less than \$50,000	35%
\$50,000 or more	54%
Age	
18 to 34	54%
35 to 54	43%
55 or older	14%
Geography	
Rural	29%
Non-Rural	38%
Race/Ethnicity	
Caucasian	34%
Black or African American	51%
Hispanic	55%
Other minority	29%

Hispanic and African American adults in Michigan are much more likely than Caucasians to access mobile broadband services. Over one-half of African American and Hispanic adults in Michigan say they stay connected to the Internet using mobile broadband services. For these two groups who have traditionally been on the wrong side of the Digital Divide, mobile broadband may present an affordable alternative to fixed broadband service.

How often Michiganders Use Mobile Broadband via Their Cell Phones

Statewide, approximately 5.7 million Michigan adults own cell phones, and 46% of those cell phone owners subscribe to a service that allows them to access the Internet on their cell phones. Among those who can access the Internet on their cell phones, more than one-half (54%, representing approximately 1.4 million adult Michiganders) do so on a daily basis. On the other end of the usage spectrum, 16% of Michigan adults who subscribe to broadband service for their cell phone never use their subscriptions. This translates into approximately 414,000 Michiganders who pay for mobile Internet service but do not take advantage of it (Figure 2).

Figure 2.
Frequency of Mobile Internet Use among Michiganders
who Access the Internet on Their Cell Phones



The frequency of mobile Internet usage varies between different demographic groups in Michigan. Even though the ability to access mobile broadband via a cell phone is often seen as a cost-effective alternative to home broadband service, certain segments of the population are less likely to use their cell phones to go online even if they subscribe to a service that allows them to do so.

Older Michiganders, rural residents, households without children, and adults who are not employed are more likely to say they have the capability of accessing the Internet on their cell phones, but they never do so (Table 2).

Nearly nine in ten employed Michigan adults who can access the Internet on their cell phones say they do so, compared to fewer than seven in ten Michiganders who are not employed. Similarly, college-educated Michigan adults who have the option of accessing the Internet on their cell phones are more likely to do so than those with no college education. In addition, nearly one in four residents without children, nearly one in four rural residents, and 44% of Michigan adults age 55 or older say they never use the Internet service that is available to them on their cell phones. This suggests that as with home broadband service, getting Michigan residents connected to mobile broadband service is not only a matter of making it available, but introducing them to ways in which it can enrich their lives.

How Michiganders Use Mobile Broadband on Their Cell Phones

The benefits of mobile broadband are many; for some Michigan residents, mobile broadband is the only type of Internet service available to them, or it is the only Internet service they can afford. Yet some are concerned that the ability to use a smartphone, while providing opportunities to stay connected to friends and family and access social media sites, does not lend itself to online applications such as filling out job applications or running a home-based business. So it is important to observe not only how many people are using their smartphones, but also how those individuals are using their smartphones.

Across the state of Michigan, approximately 2.2 million adults go online using their cell phones. More than nine out of ten Michigan adults who access the Internet on their cell phones say they do so to communicate via e-mail or similar methods (Table 3).

Table 2.
Michigan Adults who Subscribe to Mobile Broadband on their Cell Phones but Do Not Use the Service

Employment Status	Never Use
Employed	10%
Not employed	31%
Educational Attainment	
No college education	20%
College education	14%
Presence of Children	
Households with children at home	6%
Households with no children at home	24%
Annual Household Income	
Less than \$25,000	21%
\$25,000 to less than \$50,000	21%
\$50,000 or more	10%
Age	
18 to 34	6%
35 to 54	15%
55 or older	44%
Race/Ethnicity	
Caucasian	15%
Black or African American	16%
Other minority	15%
Geography	
Rural	23%
Non-Rural	14%

Table 3.
Mobile Application Usage via Cell Phone

Communicating through e-mail or other ways of sending messages	91%
Exploring or participating in hobbies or personal interests	70%
Reading online newspapers or other news sources	56%
Researching or purchasing goods or services	47%
Online banking or paying bills	42%
Searching for medical information, or communicating with doctors or healthcare professionals	27%
Searching or applying for jobs	18%
Taking online classes or conducting research for schoolwork	14%
Interacting with government offices or elected officials	12%

The majority of Michigan adults who go online via their cell phones say they explore or participate in hobbies and personal interests, while more than one-half of these mobile users (56%) read online newspapers or other news sources. Researching or purchasing goods and services has become less popular via cell phones compared to Michiganders with home broadband service, in which this is the second most used application.

Other applications, such as e-Health applications, searching and applying for jobs, taking online classes or conducting research for school, and interacting with government offices or elected officials are used much less often.

Conclusions

More than one-third of adults in Michigan are mobile Internet users, and 76% of those mobile users go online only using their cell phones. For many Hispanics and African Americans, mobile broadband is the best (or only) option for them to go online, resulting in significantly higher mobile broadband adoption rates.

Yet mobile broadband subscriptions do not always translate into broadband usage. Nearly one in six Michigan adults who can use their cell phones to access the Internet never do so, including a large share of rural adults, older Michiganders, and those who are not employed.

Those who do go online via their cell phones most often do so for communication, exploring or participating in hobbies or personal interests, and reading news online. e-Health applications, searching and applying for jobs, and e-Learning applications are used much less frequently, though, suggesting that while smartphones provide an opportunity for many to connect to the Internet, they are not necessarily a substitute for the ability to access the Internet on a computer.



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Methodology and Definitions

Between June 27 and August 18, 2011, Connect Michigan conducted random digit dial telephone surveys of adult heads of households across Michigan. This sample included 1,006 adults age 18 or older who were contacted via landline and 194 adults who were contacted via cell phone. Once the respondent agreed to participate, these surveys took approximately eleven (11) minutes to complete and were designed to measure technology adoption (including speeds and prices) and usage.

“Technology Adoption” is defined as follows:

Broadband adopters are defined as respondents who answered “yes” when asked “Do you subscribe to the Internet at home?” and answered “broadband or high speed Internet service” when asked “Which of the following describe the type of Internet service you have at home?”

Mobile Internet users are defined as respondents who meet any of the following criteria:

- They responded that they use a cell phone to access the Internet while at home when asked “When you are at your home, which of the following devices do you use to access the Internet?” or
- When asked “At what locations outside of your own home do you use the Internet?” responded “Through a cell phone or handheld device” or
- Responded “yes” when asked “On your laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network?” or
- Responded “yes” when asked “On your cell phone, do you subscribe to a plan that allows you to access the Internet?” and reported that they access the Internet via their cell phone when asked “How often, if ever, do you go online using your cell phone?”

Multiple attempts were made to each working telephone number on different days of the week and at different times of the day to increase the likelihood of contacting a potential respondent. To ensure a representative sample, quotas were set by age, gender, and county of residence (rural or non-rural), and the results were weighted to coincide with 2010 United States Census population figures. For the purpose of setting quotas and weighting, “rural” respondents are defined as living in a county that is not a part of a Metropolitan Statistical Area (MSA), as designated by the United States Office of Management and Budget. Weighting and design consultation were provided by Lucidity Research.

Surveys were conducted by Thoroughbred Research. Based on the effective sample size, the margin of error = $\pm 3.09\%$ at a 95% level of confidence for the statewide survey. As with any survey, question wording and the practical challenges of data collection may introduce an element of error or bias that is not reflected in this margin of error.

These surveys were conducted as part of the State Broadband Initiative (SBI) grant program, funded by the National Telecommunications and Information Administration (NTIA). The SBI grant program was created by the Broadband Data Improvement Act (BDIA), unanimously passed by Congress in 2008 and funded by the American Recovery and Reinvestment Act (ARRA) in 2009. To learn more about Connect Michigan please visit www.connectmi.org or e-mail us at info@connectmi.org.

APPENDIX A:
Select questions and sample sizes

	<i>n</i>
Statewide	1200
Cell phone plan allows Internet access	389
Ever use the Internet via cell phone	316

Demographics	<i>n</i> Total	<i>n</i> Subscribe to Internet Service via Cell Phone
Employed	612	282
Not employed	561	105
No college education	421	87
College education	741	300
Households have children at home	409	186
Households do not have children	761	197
Annual household income: Less than \$25,000	244	42
Annual household income: \$25,000 to less than \$50,000	276	88
Annual household income: \$50,000 or more	426	207
Age 18 to 34	250	133
Age 35 to 54	487	189
Age 55 or older	463	67
Caucasian	948	295
Black or African American	99	52
Other minority	90	33
Rural	807	106
Non-Rural	393	283